R4 EtO Commercial Sterilizers Outreach Meetings - Memphis, TN

In-person and virtual hybrid events October 18, 2022 Monumental Baptist Church 704 S Pkwy E, Memphis, TN 38106

>>>NOTE ALL TIMES ARE CENTRAL<

Open House: 10:00 am - 11:00 am (in person only) Community Meeting: 11:15 am - 12:45 pm (hybrid)

Zoom Meeting Link: [HYPERLINK "https://usepa.zoomgov.com/s/1614966124"]

Call-in No: (883) 435-1820; Webinar ID: 1614966124

Open House: 6:00 pm - 7:00 pm (in person only)
Community Meeting: 7:15 pm - 8:45 pm (hybrid)

Zoom Meeting Link: [HYPERLINK "https://usepa.zoomgov.com/s/1617052397"]

Call-in No: (883) 568-8864; Webinar ID: 1617052397

Technical Notes

- Everyone in virtual environment needs to be on the webinar at 10 AM and 6PM CST.
 - Everyone should stay off camera and muted unless you are speaking except during Q/A then the podium speaker/panelist table will be on camera.
- In-person panelists for Q/A:
 - o Caroline Freeman EPA technical
 - o Madeline Beal Risk Communications
 - Dr. Michelle Taylor, Director Shelby Co. Health Dept local cancer study, local health concerns, site specific permitting, inspection or compliance questions
 - o Sue Casteel/Michelle Zeager, ATSDR Human health effects
- Available in room but not on Q/A panel:
 - o Karen Cook-Pryor, Shelby Co. Health Dept, Air pollution control
 - o Kasia Alexander, Shelby Co. Health Dept.
- Terry Johnson will be sharing their screen and showing the slides
- Brandi/Taylor will assist with reading Qs from Zoom Q&A feature (and helping get answers to Qs dropped into Q&A feature?).
- ??? will be back up for sharing slides if needed and will otherwise support QA effort.
- ??? (2 people at least) will assist with herding participants from the Open House to the Meeting area, gently reminding folks to wrap up conversations, and be seated for the start of Community Meeting by 11:15AM/7:15PM.

Run of Show

10:00AM-10:30AM & 7:00PM-7:30PM - Technical setup

11:10AM & 7:10PM – Laura Niles - Hit start webinar button; everyone on mute; allowing people to join the webinar

11:11AM & 7:11PM - Aaryn Jones - logistical announcement/welcome to virtual participants only

11:17AM/7:17PM – Aaryn Jones – calling the meeting together, moderator opening, introducing RA Blackman

11:25AM/7:25PM – Daniel Blackman, RA - speaks to the seriousness of the issue and the need to have a federal approach not an EPA approach. Shares key messages for pre-proposal outreach. Turns it back to Aaryn

11:33AM/7:33PM - Aaryn Jones - introduces Madeline Beal

11:35AM/7:35PM - Madeline Beal - What is EtO and Risk. Turns back to Aaryn

11:45AM/7:45 PM - Aaryn Jones - Introduces Caroline Freeman, ARD Director

11:47AM/7:47 PM - Caroline Freeman - Modelling, Map, Emissions, Rule. Turns back to Aaryn.

Noon/8:00 PM - Aaryn Jones - Introduces Dr. Michelle Taylor, SCHD

12:02PM/8:02 PM - Dr. Michelle Taylor — covers site specific info, local cancer study. Turns back to Aaryn.

12:10PM/8:10PM - Aaryn Jones - ask Q/A; remind folks about Q/A;

No later than 1:00PM/9:00PM: Aaryn Jones/RA Blackman-closeout

Detailed Script

Slide 1: Title slide/splash slide

Speaker: Aaryn Jones

5 mins prior to meeting, announce to virtual participants only:

Good [morning/evening] everyone, we have now opened up the meeting, and wanted to let you know you are in the right place to participate in the EPA's virtual meeting concerning Ethylene Oxide Community Risks here in Memphis. To minimize background noise for everyone, you are all muted. If you are participating via computer, feel free to use the chat feature to ask for technical help. Also, the Q&A module will be open during the meeting for you to type your questions for our panel as you think of them. If you have called in via phone line, we will have an opportunity for you to unmute to ask questions. At the appropriate time, you will press *9 to indicate that you would like to speak, and then you will press *6 to unmute. We will remind you of how to unmute once its time to ask questions. We plan to get started shortly after [11:15AM/7:15PM].

NLT than 2 minutes after proposed start time:

Hi, I'm **Aaryn Jones** from the U.S. Environmental Protection Agency. I want to welcome those of you here in the room, as well as those of you joining us virtually via Zoom or on the phone. Thank you all for taking time out of your busy lives to be here [this morning/tonight]. We have worked hard to accommodate in-person and virtual participation, and to meet any interpretation needs, but as we may encounter hiccups along the way, we will certainly appreciate your patience and understanding.

For those just joining us virtually, if you are having any trouble, please reach out using the chat feature. You can find the chat feature on the bottom of your screen.

SLIDE 2 - General Title Slide

I'm Aaryn Jones from the U.S. EPA Region 4 in Atlanta, GA and I'm the moderator for today's meeting. In Region 4, I serve as an Emerging Contaminants Coordinator, which means many of the issues I'm involved with center around new science and evolving information that the agency has learned could be impacting public health or the environment. Sometimes, the science is so new that the agency doesn't yet have regulations in place, and in those moments, we are actively engaging with communities, stakeholders, and our co-regulators to move towards solutions. This is exactly the space we are in right now, so I am thankful that you all are here so that we can give you background on an important issue facing your community, discuss our agency's planned next steps and most importantly, be able to answer your questions.

We have gathered here at the historic Monumental Baptist Church – and let me stop here to thank those of you who call this church home for allowing us to use this beautiful location to be here with you this [morning/evening]. This church is near the neighborhoods that are impacted by air pollution and we want to acknowledge and further explain the risks that exist in this community.

For several reasons that my colleagues will describe today, this is a tough issue to communicate, and I want to acknowledge that this may not be an easy conversation we are going to have. So, now I want to talk about the flow of this meeting so you can know what to expect and you can prepare to ask questions at the appropriate time.

Today you will hear from:

EPA Region 4 Administrator, Daniel Blackman;

EPA Region 4 Air and Radiation Division Director, Caroline Freeman;

EPA HQ Senior Risk Communication Advisor, Madeline Beal;

And Shelby County Health Department Director, Dr. Michelle Taylor.

We will also have a panel of technical experts available for a Question and Answer session, including our partners at the Agency for Toxic Substances and Disease Registry (ATSDR) and the Shelby County Health Dept.

We are going to address questions this [morning/evening], once our speakers have shared their information with you. So when the time for Q/A comes, we will first take questions from those in the

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Commented [JA1]: [HYPERLINK "mailto:Beal.Madeline@epa.gov"] is this your preferred title?

room. Then we will rotate to those questions we receive from our Zoom participants, so for those online, as we are going along, please type your questions into the Q/A module and submit as soon as you think of them. Then for the third rotation, we will remind our phone participants to unmute themselves to raise any questions. We will continue to cycle from those here in the room, to online Zoom, to phone participants every 5 minutes or so.

As the moderator, I will do my best to keep us on target, and to make sure your questions are answered and that we communicate clearly about what we know and how we are working to address it. This may mean asking you to clarify your questions or asking our speakers to readdress something I feel that it is unclear. I also want to acknowledge that you may have other concerns tonight that aren't just about the risk from this one chemical and this one facility. While it is always important to us to hear about all of your concerns, our team that is here today is prepared to update you on one specific source of air pollution impacting this community. However, if we don't know the answer to a question or questions, we will do our best to follow up as soon as possible afterwards. This is VERY important to us.

SLIDE 3 - Contact info, site webpage link

If we don't get to your question, please know you can always email us at [HYPERLINK "mailto:Region4EtO@epa.gov"] or call 800-241-1754. Also, we are recording this session and will make the slides available as well, so that those who couldn't join us today can access the content, or those of you who are here with us can go back and refer to it at your convenience. The website link shown on this slide will host this meeting's recorded content and slides.

SLIDE 4 – DB Title Slide

With that, I would now like to turn it over to the EPA Region 4 Administrator, Daniel Blackman. In his role, he oversees our agency goals of protecting human health and the environment here in in the Southeast Region. For those of you that don't know, Region 4 represents 8 states, including Tennessee, and 6 federally recognized tribes. Regional Administrator Blackman is a passionate leader who has dedicated his career to creating economic opportunities for marginalized communities throughout the South and working to ensure a healthy environment for all, not just a select few. RA Blackman, the floor is yours.

RA Blackman remarks:

Good morning/evening. Thank you for taking time out of your busy lives to be with us to learn more about the issue of ethylene oxide emissions in this area of Memphis.

It was extremely important to us that we convene a meeting with the residents and other impacted groups near the Sterilization Services of Tennessee facility. Important because EPA is laser focused on ensuring that all of you see that we are committed to communicating clearly, frequently and as transparently as possible.

I would like to take a point of privilege here and just pause as I take in being present in Memphis today. *Memphis*. Steeped in history, pain and soul. Being here in this church, Monumental Baptist, I am acutely aware that Rev. Samuel Billy Kyles, the Memphis pastor and civil rights leader, who stood on the balcony next to Martin Luther King, Jr. when he was shot, led this church for over five decades. This community

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Commenses (\$12): Here is some imagings that might be beinful. I also want to admostledge that you may have other concerns whight that are full stabout the list from this ene chemical and this one facility. It is important to us to brea about all of your concerns twen if they aren't retared to the precilic chemical we're discussing in our presentation, if we don't know the answer it is question or questions, we will don't know the answer it is question or presentation. This is vifit to VERY important to us

was extremely fortunate to have been influenced and mentored by a leader with such strong foresight and fortitude. Having been mentored by civil rights legends C.T. Vivian, Andrew Young, and John Lewis, I, too, know how precious it is to embrace and remember our history and recognize it's influence on our progress today. And as we must continue in this good, necessary work, I want to thank Pastor Bryant for allowing us to gather here today.

We are in an unprecedented time of access, equity and leadership. The Biden-Harris Administration has been aggressively implementing programs and initiatives to embed environmental justice, civil rights and equity across the government and EPA is at the forefront of these efforts. Today's/Tonight's meeting is an example of these efforts. EPA is stepping outside of our traditional role of proposing a rule and giving the community a certain amount of time to learn about the rule and provide feedback -- all during the rulemaking process. Instead, we are presenting the challenge to you now, **before** the rulemaking process begins, so you can be informed about how this issue impacts you and your family and make the best decision that works for you. We **want** to hear from you because your input and experience is a valuable part of the process.

Thank you to the staff and leadership at the Agency for Toxic Substances and Disease Registry, the Shelby County Health Department and the Tennessee Department of Environment and Conservation. Again, this is a new approach for EPA, and I am grateful that those we work closely with to ensure the fair implementation of environmental laws and the protection of public health and the environment, have been coordinating with us throughout this process.

We are here tonight to talk about air pollution from a chemical called ethylene oxide. As my colleagues will discuss in more detail, ethylene oxide can cause health risks, and it is also an important chemical to ensure the safety of a wide variety of medical devices that are used by doctors, hospitals, and dentists.

This chemical is used in a type of facility known as a commercial sterilizer. There are about 100 commercial sterilizers around the country and some of them are emitting ethylene oxide into the outdoor air at a level that is concerning. This includes the Sterilization Services of Tennessee facility here in Memphis.

As I stated earlier, this is only the beginning of the conversation. EPA is sharing this information now so that you have access to the same information that we have at EPA and can make informed decisions about risks and your health. EPA is committed to keeping you informed throughout the process.

First, risk in Memphis is high, and EPA is concerned about this risk.

Second, we are committed to protecting health in communities facing risk from ethylene oxide and we are taking this issue seriously. I commit to you today that we will continue to work on this issue until the risk levels are reduced. This includes using the tools we have available to us at EPA, such as regulations and on the ground partnerships with states, communities, facilities, and anyone who can work with us to help reduce the risk. These partnerships have already reduced risk in a number of communities, but we need to do more.

Third, you deserve to be a part of this process, to have your voices heard, your concerns shared, and your needs met.

You can also find more details about everything we will talk about tonight -- including how to make your voice heard -- on EPA's website, over the phone, or by directly emailing us.

I will now turn it back over to Aaryn.

SLIDE 5 - Madeline Intro

Aarvn:

Thank you, Regional Administrator Blackman. I would now like to introduce Madeline Beal, who serves as a Senior Risk Communication Advisor at EPA HQ. Madeline....

Madeline Beal Script

Thank you, Aaryn. I am going to share some information about the chemical ethylene oxide. I am also going to talk about the health risks associated with this chemical. It is a lot of information for one meeting including some technical aspects. Because of this we want to make sure that your questions help drive the conversation. Over half of our agenda tonight is set aside for time to take questions.

Before we get into the details, I want to repeat what Aaryn said at the outset, that I understand that this presentation might be upsetting or frustrating. While I work for EPA, I am also a mom of four young children and as I have learned about this issue, I have been concerned about how it would feel to be in the audience to learn that there might be a risk in my community, a risk to my family. I personally feel like I have to know a lot and balance a lot to make decisions to help my family have the best possible future and this will likely feel like a new challenge to learn about and consider as you make choices for your own families. And I just want to validate that it is totally reasonable if you feel scared or upset or angry at any of this information.

A big part of my job is to help explain risk to community members impacted by that risk. I have the job that I have because I believe strongly that this communication is important. For EPA to protect health we need to share the information we have with the public, with communities, with you, AND we need to do that in a way that is understandable and that helps inform decisions you might be making about your own families' health. If we say things tonight that are hard to follow, or we speak with too much technical language, please let us know when we get to the Q and A section and we will take the time to explain things a different way.

Slide #6: Why we are here today

I want to first share (from my perspective) what the 3 main takeaways are tonight.

- First, risk in Memphis near the Sterilization Services of Tennessee facility is too high. EPA is concerned about this risk.
- Second, we are committed to protecting health in this community and we are working to reduce this risk and we will continue to work on this issue until the risk levels are reduced. This includes using the tools we have available to us at EPA, such as regulations and on the ground partnerships with states, communities, facilities, and anyone who can work with us to help reduce the risk.
- Third, you deserve to be a part of this process, to have your voices heard, your concerns shared, and your needs met. There is a lot more information available online on how to be involved and heard and we will talk more about this throughout tonight's meeting.

Slide #7: What is EtO?

You've already heard that we are talking about air pollution from a chemical called ethylene oxide, which we often refer to as EtO.

Occasionally people call this EO as well so if you see EtO, EO or Ethylene Oxide, it is all taking about the exact same chemical. EtO is a gas. You usually can't smell or see EtO in the amounts we find in the air near facilities or in communities.

EtO is used to kill bacteria and other germs. Specifically, it is used to sterilize medical equipment and spices. <u>Sterilization Services</u> of Tennessee uses EtO to sterilize surgical supplies for the dental and medical industry.

Slide 8: No Indication of non-cancer risk (Acute or emergency health impacts) from Water/Soil...

EtO comes out of this facility as air pollution only. We have no information to suggest that EtO is coming out into the water or onto the ground in any way that would cause risk.

When it comes to short term health benchmarks, we haven't seen any evidence that EtO near these facilities causes urgent or acute health issues like nausea, dizziness, and breathing problems. This is an important point, the science we have done only points to risks from a long-term exposure based on our best current knowledge of what is happening at these facilities.

Generally, you as a consumer, don't need to be concerned about risk from EtO that might be left over on products that were sterilized with EtO. Again, the risk we are concerned about is to people who live near and work at these facilities.

So if these are the things that we aren't worried about, what are we worried about?

Slide 9: Lifetime Exposure

What we've learned, is that EtO can cause cancer when people are exposed over long periods of time. Specifically, it can cause breast and lymph or blood cancers. By long periods we mean when people who live near one of these facilities breathe EtO every single day from birth until age 70.

Slide 10: Special Considerations of Risk

Certain people are more at risk from EtO. This can happen either because they spend more of their time in areas where there is a lot of EtO, like might occur in workers who work at these facilities or it can happen because, for some reason, their bodies are more susceptible. Children and babies are more vulnerable to EtO exposure. My colleague, Caroline, will talk more about this in a moment, but because we know children are more vulnerable, we explicitly consider that in our analysis.

Slide 11: National Context

Now I want to provide a little more national context.

There are about 100 of these commercial sterilizers in the country. You can see where they are located on the map here. The blue dots show the locations of the 23 sterilizers where we anticipate risk to be the highest for the people who live nearby. Sterilizations Services of Tennessee is one of those 23 facilities with the highest level of risk.

We are focusing the conversation today on this facility because we believe there is a higher risk to people who live nearby, but I want to be clear that there is also potential risk to people who work in these facilities or who work or go to school nearby. We are considering all the almost 100 sterilizers when we think about these issues and propose solutions in our regulations.

The information we are sharing tonight and that we have posted on the web is all based on information we have collected from these facilities about their use of EtO. If EPA receives new data, we may update this information. We are continuing to collect and verify information about these facilities and if we learn and are able to verify important steps that they have taken to reduce risk, we will share that information on the webpage for that facility.

Slide 12: Individual Risk Considerations

I want to end on a few thoughts on things you will want to think about if you are trying to understand what our conversation about risk might mean for you and your family. When we think about risk at EPA, we think about those risks at a population level and we make a lot of assumptions about the ways in which people might be exposed. That EPA way of thinking about risk isn't always easy to translate into what you might need to know if you want to know about individual level risk or potential risk to your family. In general, if you want to understand your family's risk there are three things to know:

- 1. how close are you to the facility?
- 2. how much EtO is coming out of the facility?
- 3. how long have you been exposed, both in terms of years in your neighborhood and hours each day that you are near the facility?

EPA is working on this second bullet, to reduce the EtO coming out of the facility, because we think this is the best way to reduce risk as we move forward and to make your community safer, but all three of these issues are important to think about on an individual level.

[SLIDE 13 - CF Title Slide, pic of R4]

Thank you, Madeline. I would now like to introduce Caroline Freeman, Director of the Air and Radiation Divison for EPA Region 4. Caroline works closely with state, local, and tribal governments, like Shelby County Health Department, industry, and others to achieve and maintain clean outdoor air, including reduction of exposures and risks associated with criteria and hazardous air pollutants like the EtO risk from the commercial sterilizer in your community. Caroline, I'll turn it to you.

Commented (GT3): Think you should localize this more.

why does the community care that Cerdine is willing.

Commented (FC483):

Caroline Freeman Script

Thank you Aaryn.

Good Morning/Evening Everyone,

Today I will be sharing information with you about the risk posed by Ethylene Oxide from Sterilization Services of Tennessee in your community, and the actions that are already underway or planned by EPA to reduce the risk from the Sterilization Services of TN facility.

Slide 14: EPA's Risk Modeling Analysis

Now I am going to share a little more detail about the analysis we have completed and what it tells us about this community.

Between 2021 and 2022, EPA scientists collected and analyzed the best information and data available from Sterilization Services of Tennessee. The EPA then combined that data with other local information like weather patterns, and the locations of homes.

Using those factors, the EPA was able to model the risks from EtO. I want to note that the EPA's analysis only reflects your potential exposure risks related to EtO from Sterilization Services of Tennessee.

Therefore, the risk that I am sharing information about today is an additional or "incremental" long-term risk for getting certain cancers from EtO, that we have modeled.

I want to remind you about what Madeline said earlier, that to estimate risk from a given chemical, we need to know 3 things:

how toxic the chemical is,

how much there is in the air, and

how long throughout a person's life someone might be exposed to that chemical.

Because EPA's analysis must be protective of human health, these estimates are very conservative and are on the high end.

Meaning, we assume that people spend all of their time in the area where there is risk – specifically, we assume exposure for 24 hours a day, 7 days a week, from birth to age 70, where the individual is breathing in EtO in the area where the risk exists.

Those **might** not be realistic assumptions, because almost everyone leaves their home as some point. **But these assumptions** help us ensure that going forward we protect the most vulnerable – even in that most extreme situation.

Slide 15: Facility Boundary Map (to be inserted later)

Now I'm going to share with you a google street map of your community with landmarks east xxx and west xxx; north yyy and south yyy – to provide you with a better view of the modeled risk from Sterilization Services of Tennessee.

Impacts extend south to East Peebles Rd; north to South Parkway East; 250' west of the intersection of I-55 and Riverport Rd; and east to South Lauderdale Street.

Now I am going to transition to the gradient map.

Slide 16: Gradient Map Slide

The gradient map displayed on this slide is used to show the EtO risk from **Sterilization Services of Tennessee**.

I would also preference that - We believe that there is elevated risk to people who live closest to Sterilization Services of Tennessee.

But I want to be clear, that **there** is also potential risk to people who work in or near this facility and to those that go to school nearby this facility.

Now, I want to point out a few features on the map:

- The dark orange box is the facility itself.
- The lighter orange area is a non-residential area near the facility where risks are high.
- And the blue area **includes** residential areas where risks are at or above 100-in-1-million

In the blue area, the darker shading reflects higher risks and lighter shading lower risks, albeit still at or above 100-in-1-million. Note that as you move away from the facility, the blue shading gets lighter meaning that the risks get lower.

There is some uncertainty in these estimates as both operations at the facility and weather can change, but these are the best health-protective estimates we have available.

At the EPA, we are concerned about all risk but we use 100-in-1-million as our benchmark for identifying whether risk levels are considered "high."

When we say, 100 in a million we are saying that we estimate EtO exposure could contribute to an increase of 100 cancer cases if one million people were exposed at that concentrated level for 24 hours a day, 7 days a week, from birth to age 70.

We start our calculations at birth because we want to make sure we are protective of children.

Under the Clean Air Act, we focus on risks where people live. We are also concerned about risks to workers or others who might spend part of their time in the light orange or non-residential area and in the facility itself, but this analysis was focused only on residential areas.

The information we are sharing and have posted on the web, is all based on information the EPA collected from **Sterilization Services of Tennessee** about their use of EtO.

As the EPA receives new data, it is our goal to provide updates to the EPA website for this facility. At the EPA it is also our goal to continue collecting and verifying information about this facility and as we learn more and are able to verify important steps that Sterilization Services of Tennessee has taken, or will be taking to reduce risk to EtO.

At EPA, we are very concerned about this risk in your community.

Slide 17: Recent Steps to reduce risk

Next, I am going to share with you some recent steps the EPA has taken to reduce risk from Commercial Sterilizers thus far, and how you can get involved.

While we have only fully understood the risk here in Memphis since we completed work at the end of July of this year, we have been working on this issue for some time.

The EPA has had regulations in place on EtO emissions for 30 years (40 CFR Part 63 NESHAP Subpart O Commercial Sterilizer – 1996). In 2016, because of updated science, we learned that EtO was more dangerous when you breathe it in.

In 2018, a national-level analysis provided an initial indication of which areas might have higher risk, but it wasn't detailed enough - either to inform our regulation or to really help communities.

We needed to collect additional data to learn more about exactly where these risks are located and what solutions are available to prevent these risks. That work took about two years and brings us to where we are today.

I also want to note that while the EPA very recently came to know the exact details of potential risk here in Memphis, EPA understands now that the risk has potentially been occurring in your community for as long as this facility has been using EtO since 1973.

To be clear, our risk estimates represent current – not historical – conditions because that is the best, and in some cases, the only information we have. It is also the information we need to set regulations going forward.

Slide 18: Where is it coming from?

I want to take a step back for just a minute and explain where this pollution is coming from within the facility because this information is important to understand how solutions can be put into place to reduce risk.

There are two types of ways that EtO can leave a facility. The first is that after EtO is used to sterilize things, it is sucked into a "control system." These systems actually clean EtO out of the air and capture it or break it down before releasing a much, much smaller amount. This type of EtO coming out of a facility is called controlled emissions.

SST has controls on several processes at their facility. Their sterilization chambers and primary aeration rooms are controlled and pass-through control devices that are required by state and federal permits and standards.

The second type is EtO that doesn't get sucked into the control system. It is EtO that escapes through other places: leaks, gaps, even windows and doors. This escaping EtO is sometimes called "fugitive emissions."

Fugitive emissions unfortunately are not covered under the current regulation because when that regulation was written we did not realize their importance.

At SST the majority of risk is coming from these escaping emissions or fugitive emissions. (14% controlled stack emissions vs. 86% uncontrolled fugitive emissions at SST)

Slide 19: Reducing Risk

The best solution to reducing this risk, is to reduce the amount of currently not regulated EtO fugitive emissions that is coming out of this facility.

Unfortunately, there are not many actions that you personally can take to reduce risk, because this isn't a chemical that you can easily remove with a home air filter or completely reduce your risk by staying inside.

However - Spending less time near this facility would reduce your risk.

But again, the best solution is to reduce the amount of EtO that is coming out of this facility.

We have also learned that EtO is not a chemical that lasts for a long time in the environment. This means that reducing the amount of EtO coming out of this facility, will also reduce risk to the neighboring community right away.

Slide 20: What to Expect as Next Steps from EPA

The EPA is taking action to reduce the amount of EtO coming out of this facility and others like it:

- At the EPA, we are updating the air pollution regulation that limits how much of this chemical commercial sterilizers like Sterilization Services of Tennessee can put into the air.
- 2. The EPA expects to propose the updated air pollution regulation in the coming months. At that time, there will be a public comment period and at least one virtual public hearing will be scheduled. The public comment period for a major air pollution regulation like this one is typically 60-90 days. Regulations often take about a year to become final once the public comment period closes. Once a regulation is final under the Clean Air Act, new facilities must comply upon startup but existing facilities typically have up 3 years to comply with the regulation. However, EPA plans to solicit comments on a shorter compliance period.
- During the public comment period, you will have an opportunity to comment on the proposed regulations.
- 4. In the interim, we are also working with our federal, state and local government partners, the facilities with the highest risk, and anyone who will help us reduce the amount of EtO coming out of these facilities as soon as possible.
- As I mentioned before, we are also concerned about risks to workers in this facility and to people who work or go to school near it. That is why the EPA is also working on a worker exposure rule

under another federal law and intends to take that action along with our updated air rule for commercial sterilizers. The Tennessee Occupational Safety and Health Administration is also available to respond to occupational exposure risk to EtO as well. T-OSHA is also responsible for regulating worker protection and occupational exposure in the workplace

Slide 21: Key Points

EPA has learned that EtO is causing health risk in your community.

- We are working to reduce this risk by:
- Working across government and with our co-regulators, specifically with Shelby County Health Department, to reduce EtO coming from Sterilization Services of Tennessee.
- We are strengthening two sets of regulations to be more protective of public health.

We are also sharing this risk result with you, so you have the same information we have.

As I prepare to close, I must speak on accountability. As several of us have mentioned at the outset, we have a responsibility to protect human and the environment. At the EPA, we do this by relying on the most current scientific knowledge to develop effective regulations, by holding facilities accountable to these regulations through enforcement, and by communicating clearly with you about our work and the knowledge we gain through this work. As my Regional Administrator said earlier today, we are committed to continuing to work on this issue until the risk levels are reduced.

As the EPA Air Director for the Southeast Region, I too take this risk seriously, and I commit to you this morning/evening, that I will take the necessary steps to make sure that the web site for this community remains up to date to inform you of the regulatory developments and of any made known actions taken by Sterilization Services to reduce their EtO risk in this community.

Thank you for your time and attention this morning/evening, and now I will turn the meeting over to our Moderator Aaryn.

*Slide 22: State/Local Insert Slides about Facility Here

Slide 23: Q&A

Thank you, Caroline/Dr. Taylor. We know that was a lot of information, and we would now like to take any questions you may have. Again, we will start with those in the room, please make your way to the microphone to ask your questions. We want to make sure that your questions can be heard clearly by those in the room and those participating virtually. Then, for those participating online via Zoom, we will read questions from those that have typed them into the Q&A chat box. Next we will ask those participating on the phone to press *9 – this lets us know that you have a question (so its like raising your hand), then we will ask you to wait to be called on, and we will do that by identifying phone callers by the last four digits of your phone line, and invite you to unmute your line by pressing *6.

Let me introduce our panel:

Here in room:

- We have Madeline Beal, our EPA Senior Risk Communication Advisor
- Caroline Freeman our ARD Director
- **Dr. Michelle Taylor, Director of the Shelby Co. Health Dept** *local cancer (incidence study requested); site specific permitting, inspections*
 - Not on panel but Dr. Taylor may pivot, available in-person Karen Cook-Pryor, Shelby Co. Health Dept, Air Pollution Control – Site specific permitting, inspections, also Karen's supervisor, Kasia (Kay-see-uh) Alexander.
- Sue Casteel (R4)/Michelle Zeager (HQ), Agency for Toxic Substances and Disease Registry (ATSDR) general Human health effects

So, lets get to the first of questions here in the room.

Rotation from in-person Qs, to virtual Q&A panel Qs (Taylor/Brandi), to allowing unmute of phone participants.

Slide 24/Final slide:

Aaryn - Meeting conclusion:

Thank you for joining us in person and virtually today.

Just to recap, and close us out, We will post the meeting slides and recording of the Zoom meeting to the webpage for Memphis EtO that we have shared multiple times tonight. [HYPERLINK "http://www.epa.gov/eto/Memphis"]

Sign up for updates and any new information or updates that we have will be posted to this webpage going forward.

Thank you to our partners who joined us tonight in person from the Shelby County Health Department and ATSDR.

Any closing thoughts?